

October 11, 2000

(VIA HAND DELIVER) **RECEIVED**

OCT 12 2000

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Ms. Magalie R. Salas  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

**Re: Supplemental Comments of the Aerospace States  
Assoc.  
ET Docket 98-153**

CHAIR  
Lt. Gov. Joseph E. Kernan  
  
EXECUTIVE DIRECTOR  
Del Schuh  
dschuh@bmtadvantage.org



**Aerospace  
States Association**

ONE NORTH CAPITOL, SUITE 925  
INDIANAPOLIS, INDIANA 46204  
PHONE: 317/635-3058  
FAX: 317/231-7095  
www.aerostates.org

Dear Ms. Salas:

The attached comments are being filed by the Aerospace States Association (ASA). It is a non-profit scientific and educational organization composed of governor-appointed representatives from over forty states that strives to promote a state-based perspective in federal aerospace policy development.

These supplemental comments are being filed to express our strong opposition to the Commission's Notice of Proposed Rule-making (NPRM) that would allow Ultra Wide Band (UWB) devices to operate across the safety-of-life Global Positioning System (GPS) band.

In summary, our comments stipulate that the Commission has very limited data upon which to render an informed decision allowing issuance of this rule. Our state government members have made considerable investments in the emergency, public safety and resource management services critically dependent on the stability and integrity of the GPS. The Commission should immediately extend the deadline for submission of test results and refrain from issuing any rules pertaining to UWB until complete and thorough testing is finished and it is conclusively demonstrated that GPS signals will not be harmed.

We have also enclosed a resolution unanimously endorsed by our membership that identifies our critical dependence on GPS for safety-of-life and other public services.

An original and five copies of these Supplemental Comments and its enclosures are being submitted for inclusion in the record of the subject proceeding.

Respectfully submitted,

  
Mr. Courtney A. Stadd  
Policy Director

No. of Copies rec'd 015  
List A B C D E

[Enclosures]



August 28, 2000

The Honorable William E. Kennard  
Chairman  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, D.C. 20554

Re: Postpone Action on NPRM Concerning UWB (Docket 98-153)

Dear Chairman Kennard:

CHAIR  
Lt. Gov. Joseph E. Kernan  
  
EXECUTIVE DIRECTOR  
Del Schuh  
dschuh@bmtadventure.org



Aerospace  
States Association

ONE NORTH CAPITOL, SUITE 925  
INDIANAPOLIS, INDIANA 46204  
PHONE: 317/635-3058  
FAX: 317/231-7095  
www.aerostates.org

The Aerospace States Association (ASA) is a non-profit organization composed of governor-appointed representatives from over forty states. While we focus on high technology-related issues, we recognize that we have a fundamental responsibility to ensure public safety for our fellow citizens.

Accordingly, we are very troubled by recent press reports that your agency is considering issuing a rule that will allow the newly emerging Ultra Wide Band (UWB) devices to operate across the safety-of-life GPS frequency band. It is our understanding that your agency is considering a proposal to allow the unlicensed operation of UWB devices in all frequency bands now restricted for safety-of-life services. UWB represents an unproven new technology with considerable promise, and we are dismayed by the prospect of the FCC allowing this rule to be approved in the absence of comprehensive interference testing. With the announcement of the Notice of Proposed Rule-Making issued just last May, and with test data due by October 30, 2000, the FCC will have very limited data upon which to render an informed decision regarding such a matter of literally life and death importance to our members. To say the least, our membership has a fundamental interest in the outcome of your rule-making deliberations. Our state, local and county governments have made extensive investments in the emergency, public safety and resource management services critically dependent on the stability and integrity of the GPS. From the standpoint of our membership, this pending regulatory action has many complex consequences:

- ☐ fully assessing the impact of UWB devices on GPS, a space-based information system involving 20 million plus users in every state;
- ☐ dealing with the reality that the noise floor for a service like GPS can increase faster than the \$17 billion taxpayer supported system can be modernized to accommodate;
- ☐ understanding the impact of UWB interference to critical infrastructures such as the telecommunication networks and electric power networks that rely on GPS precision time;
- ☐ consequences the consequences to our membership in the event your limited testing results in the states shouldering the new cost and liability burdens due to, for example, UWB interference with GPS-reliant emergency services

This last point is of considerable importance to us. Within the context of the federal government's commitment to the future stability and integrity of the GPS, more and more of our member states are making use of GPS in providing public safety functions to both urban and, especially, hard-to-reach rural areas. Increasingly, GPS is being viewed as indispensable in meeting our members' public safety obligations.



August 28, 2000  
The Honorable William E. Kennard  
Page 2

We have attached a resolution that identifies many of the specific benefits of GPS to the states. It received unanimous endorsement from our members and was distributed to every Member of Congress and key Administration officials. This resolution was issued in the months leading up to the World Radio Conference last May and was intended to inform Congress of our support for the Administration's publicly stated commitment to protecting GPS against interference from the emerging foreign mobile satellite systems. In the wake of the U.S. delegation's successful effort to protect GPS at the WRC, we find it all the more extraordinary that you are considering a major rule-making initiative that, without comprehensive empirical data, is subjecting the GPS user community to tremendous uncertainty in terms of potential interference to GPS applications.

We strongly urge you to exercise your authority to extend the deadline for the submission of test results and to refrain from issuing any rules, even "provisional" ones, until complete and thorough interference testing is finished and it is shown that GPS signals will not be harmed.

Given the importance of your pending regulatory actions on GPS, we would respectfully request that your office designate a senior representative with whom we might arrange a meeting in Washington so we can understand what concrete steps the agency intends to take to address our concerns. We would greatly appreciate scheduling such a meeting as soon as possible. Our next quarterly meeting is scheduled for this October in Washington, D.C. and there is no question that the status of the FCC rule-making pertaining to UWB and GPS will be of urgent interest to our members.

Thank you for your time and attention. We look forward to a timely reply.

Sincerely,



Delbert J. Schuh II  
Executive Director

cc: The Hon. Richard C. Shelby  
The Hon. Conrad Burns  
The Hon. John McCain  
The Hon. Ted Stevens  
The Hon. Slade Gorton  
The Hon. Ernest Hollings

Attachment: ASA Resolution on GPS

Resolution of the Aerospace States Association  
Fall Quarterly Meeting - Pasadena, California  
December 7, 1998

***Resolution Advocating Preservation of Existing International Allocation for  
Radionavigation Satellites Services***

**Findings**

Radionavigation satellite services are a practical application of space technology that is resulting in benefits to people around the world, including:

Provides Public Sector Benefits (at local, state, and national levels):

- Increases the efficiency of the use of fixed infrastructure assets, such as ports and harbors, roadways, rail links and air routes;
- Improves the efficiency response time of emergency services, such as police, fire, and ambulance;
- Speeds disaster relief and is fundamental to search and rescue;
- Protects property and saves lives.

Improves Industrial Base Productivity and Economic Sectors:

- Agriculture, Aviation, Automotive, Banking, Commercial Space, Construction, Emergency Medical Response, Geographical Information Systems, Mining, Mineral Exploration, Natural Resource Management, Survey, Transportation (Space, Air, Land, Maritime), Telecommunications, Utilities.

Provides a Critical Information Infrastructure Technology Component:

- Time synchronization, including: Internet, power grids, mobile and paging communication cell sites, electronic banking, and stock transactions.

Consumers worldwide use Global Navigation Satellite Systems (GNSS) to increase their safety and security in their cars, boats, airplanes, and as tourists exploring the outdoors and new urban environments, e.g., both European and American reference guides include GNSS coordinates for tourist use. Soon GNSS will be an integral component of cellular telephones 911 services.

The United States and Russia currently operate GNSS composed of radionavigation satellites. The signals from these satellites are available free of direct user charges;

In addition to the GPS and GLONASS systems operated respectively by the United States and Russia, Europe and Japan are building space-based augmentation systems to improve the accuracy, availability, and integrity of GNSS signals for international aviation;

The signals from GNSS systems, and in particular GPS, are widely used for precise navigation, positioning, and timing by users on the Earth and increasingly in space;

GNSS signals are being used to navigate and control unmanned satellites individually and as part of emerging commercial communication networks;

GNSS signals are required for crew safety aboard the Space Shuttle and will be required by the International Space Station; and

GNSS is continuing to evolve and is expected to find new uses in space and on the Earth.

### **Noting**

The International Telecommunications Union is the international organization responsible for spectrum allocations and the assignment of satellite slots in geosynchronous orbit;

Any reallocation of the radiospectrum set aside for GNSS signals (1559-1610 MHz) to communications use risks harmful and disruptive interference to operational GNSS services and the installed user base due to the incompatibility between two-way voice and data broadcast signals and receive only radiopositioning signals;

While GNSS signals are internationally protected at present in the Space-to-Earth direction, such signals are not protected in the Earth-to-Space and Space-to-Space directions;

The issue of protection for GNSS will be taken up at the next World Radiocommunications Conference (WRC-2000) in Istanbul, Turkey; and

The Aerospace States Association has as its primary interest the economic development and educational opportunities that derive from the nation's aerospace programs, and protection of GNSS is clearly in the best interest of our member states and their private and public sector entities.

### **Resolved**

The existing international allocation for radionavigation satellites services should be preserved and protected in its entirety from harmful interference;

No portion of this band should be ceded at anytime to commercial two-way broadcast due to the evolutionary nature of GNSS which is driven by rapidly growing worldwide user demand;

Protection of radionavigation satellite services should also be extended to uses in the Earth-to-Space and Space-to-Space directions;

These additional protections are necessary for future space exploration, navigation, science, and, most importantly, crew safety; and safety of people worldwide;

The Aerospace States Association will communicate its views to appropriate representatives of the ITU, national spectrum authorities, space agencies, international municipal and regional public sector counterparts, and other affected parties in order to promote international understanding and cooperation for the protection of GNSS services.

Resolved and adopted by a unanimous/majority vote of the membership this 7th day of December 1998.

(signed)

Joseph E. Kernan, Chair  
Aerospace States Association